

APPENDIX 4:

CODE OF PRACTICE FOR HANDLING RHINOCEROS ORPHANS – P. Nieuwoudt

“Each one of us, however ordinary we may appear, is capable of extraordinary acts. When you believe in yourself, you can achieve the impossible” – Lewis Gordon Pugh

The service of a veterinarian might not be immediately available to take care of a poached rhinoceros case. Therefore it is in your hands to save the rhinoceros's life. Do not panic. Stick to the basics. Do not be intimidated by the size of the animal. Mean mass of an adult bull is 2 100 kg and an adult cow 1 650 kg.

What must be available?

- List of emergency numbers: veterinarians, pilots, transport operators, etc.
- List of products necessary for treatment

What can be expected from the case presented?

- 1) Hyperthermia or hypothermia (This is the temperature of the animal: this animal is either too hot or too cold)
- 2) Hypoglycaemia (low blood-sugar levels – glucose powder/honey or syrup on the tongue)
- 3) Dehydration (fluids)
- 4) Stress
- 5) Shock: the animal's blood pressure will fall dramatically
- 6) Trauma (injury inflicted by bullets or pangas)
- 7) Capture myopathy: Insufficient blood flow to muscle and the insufficient supply of oxygen to muscle tissue.
- 8) Monitor the rhinoceros (respiration, heartbeat, temperature, etc., per minute; mention the normal values). This will also help the veterinarian to make decisions.
- 9) Keep people and noise to the minimum

Start with emergency treatment in order of importance:

- 1) *The first step is to stabilise the rhinoceros by keeping it warm and comfortable*
What is the animal's temperature? Do we need to heat him up or cool him down?
Heat up: Hot fluids through the drip, infrared lights – do whatever you need to do.
Cool down: Cold water and air movement (wind).
- 2) *Calm the animal to prevent further stress*
Tranquilize the animal to reduce stress. (Usually starts working after 10 min – if

administered in a good muscle)

Valium is the product of choice – it will stimulate food and water intake

Azaperone – short-acting (about 3–6 hrs)

Acuphase – long-acting (about 72 hrs)

All tranquillisers influence the animal's ability to regulate its body temperature and therefore must be carefully managed to prevent overheating or exposure to serve colds. These tranquillisers are mostly Schedule 5 drugs and can only be prescribed by a veterinarian. Consult your veterinarian. If you can: blindfold the animal and put earplugs in the ears (cotton wool) – this will also reduce the stress. Without the above you or the vet do not have an animal to work with!

3) *Positioning of the rhinoceros*

As comfortable as possible. Think about the blood circulation of the animal. Can he breathe properly, diaphragm, limbs (legs)? Cannot leave him in one position for too long – no blood flow, necrosis in the muscles (dead muscle tissue). Aspiration of stomach content into the lungs can lead to severe pneumonia. The pressure in the abdomen can become so great that it interferes with respiration and the animal may succumb as a result. It is desirable to put the injured or ill animal in a proper boma to be able to treat the animal until it is time to release him again. First assess whether the stress of capture and movement of the animal will not cause more harm or injury to the animal or if there is a chance that the animal may recover by itself.

4) *Prevent blood loss*

Fluids will help to prevent dehydration, hypoglycaemia, stress and trauma (the body functions can carry on as normal as possible), no or less build-up of toxins in the kidneys and liver. (In normal circumstances the water requirements is about 72 l per day.) This is not the case if you have an injured or ill animal. Then one must rather think about 10% of bodyweight. (If there is an open wound, stop the bleeding by using staaldruppels, pressure bandages, etc.)

Once the rhinoceros is stable some of the following drugs can be administered:

- Products to provide energy: Dextrose – glucose.
- Vitamins and minerals (useful to stimulate appetite, stimulate metabolism, help with stress): Phosamine Stimulants, Vit. E – stress, Vit. B complex – appetite, Selenium – such as Biosolamine (can prevent capture myopathy and further muscle damage),
- Calcium, Biorem, protexin or diatoms (help with digestion).
- Anti-inflammatory drugs or painkillers such as Phenylarthrite and Finadyne – useful to manage pain and inflammation. Be careful if you suspect an ulcer.
- Antibiotics: Long-acting penicillin or Excenel (broad-spectrum antibiotic in powder form)
- Blood pressure (in case of severe blood loss)

The feeding requirements of the rhinoceros

This is a hindgut fermenter like a horse – not a ruminant

Stress pack in the water – if he is drinking by himself, or Lectade

Lots of lucerne, hay, grass and teff. Horse pellets

Monitoring of the body temperature, body mass and physical condition is essential – if possible.

Complications that can be expected

- Colic
- Ulcers
- Impaction (they can block up)
- Diarrhoea
- Capture myopathy

Samples to be taken

- Faecal sample
- Blood sample – levels of enzymes
- Initially give easy digestible food.
- Play music to make him use to noises and sounds and to distract him from other noises.
- The boma must be strong because captive rhinoceroses will always attempt to break out of confinement.
- The site should be in an area where good-quality natural food is available.
- If possible the site must be close to a reliable water source.
- Large trees are necessary for shade, or else shading must be provided.
- The animal must be protected from cold winds (conveyer belting).
- The boma must be easily accessible to vehicles.
- There must be an absence of or only a minimum amount of gravel and loose rock in the boma to prevent injury to the feet of the animals.
- The area must be protected against veld fires by firebreaks around the boma, and it must drain well in times of rainfall.
- It is desirable to have the shelters in the boma facing north to ensure maximum shade in the summer and maximum sun in the winter.
- A pen of 20 m x 20 m is large enough to keep a white rhinoceros, while a pen of 10 m x 10 m is adequate for a black rhinoceros.
- Remember a proper loading ramp.
- Secure the gates.
- Water troughs should be approximately 1 m wide by 1.5 m long and 400 mm deep.

REFERENCES

Du Toit, J.G. (2005). Rhinoceros. In: Bothma, J. du P. & Van Rooyen, N. (Eds.). *Intensive wildlife production*. J.L. van Schaik, Pretoria.